BY ORDER OF THE COMMANDER HQ AIR UNIVERSITY (AETC)

AIR UNIVERSITY INSTRUCTION 36-2306 17 JULY 2002

Schools



AIR UNIVERSITY CURRICULUM AND PROGRAM REVIEW

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction applies to all AU educational programs except CCAF, Air Force Institute of Advanced Distributed Learning (AFIADL), Civil Air Patrol (CAP-USAF) and 42d ABW. Schools not engaged in joint professional military education (JPME) and not requiring joint accreditation are exempt from the provisions of paragraph 5. This instruction provides guidance in applying the policies and procedures contained in: CJCSI 1800.01A, Officer Professional Military Education Policy (OPMEP); AFI 36-2301, Professional Military Education, AFMAN 36-2234, Instructional System Development; AFH 36-2235, Vol 10, Information for Designers of Instructional Systems Application to Education; AFMAN 36-2236, Guidebook for Air Force *Instructors*; and AUI 36-105, *Faculty Development*, *Enrichment and Evaluation*.

SUMMARY OF REVISIONS

This revision changes the name of the Curriculum Review Board process to the Program Review Board process and changes the abbreviation from CRB to PRB for consistency. No substantive changes to this instruction have been made in this revision. These changes appear throughout the instruction.

1. Requirements.

1.1. The Air University Chief Academic Officer (HQ AU/CF) typically chairs biennial reviews of all AU educational programs. These reviews assess the requirements for and content of instructional programs to include major command (MAJCOM) and functional manager revalidation inputs, student characteristics, course goals and objectives, curriculum content (as appropriate), instructional methods, and evaluation systems. The program review addresses the application of the Instructional System Development (ISD) process as it pertains to each school's or course's curriculum plan. Instructional relevance and quality are of paramount concern.

1.2. Proposed changes to course numbers, course descriptions, credit hours, etc., listed in the Air University Catalog must be coordinated with HQ AU/CF before they are made. AU/CF will determine if additional coordination is necessary. Schools making these changes should provide a rationale to support the proposed changes. Air University Press obtains approval from HQ AU/CF prior to catalog publication.

2. ISD. AU curriculum and evaluation planners are required to use the ISD process as prescribed by AFI 36-2301, *Professional Military Education*, paragraph 2.7, AU Supplement 1 to AFI 36-2201, *Developing, Managing and Conducting Training*, paragraph 2.3.1. AFMAN 36-2234, *Instructional System Development*, AFMAN 36-2236, *Guidebook For Air Force Instructors*, and AFH 36-2235, Vol 10, *Information for Designers of Instructional Systems - Application to Education*, may be used as guides to identify and validate education requirements; develop learning objectives based on those requirements; and design, implement, and evaluate instruction to achieve the course objectives.

3. Program Review and Approval.

- 3.1. Program Review. The Air University Chief Academic Officer (AU/CF) conducts program reviews for all AU professional military education (PME), professional continuing education (PCE), precommissioning, and graduate education courses to ensure they adequately meet Air Force and DOD requirements and, in the case of PME programs, adhere to the Air University Continuum of Education (COE). Attachment 1, AU Biennial Program Review Schedule, lists the approximate time frame for schools to submit their curriculum plans to the (HQ AU/CF). The composition of the AU PRB is as follows:
 - 3.1.1. Primary (voting) members of the board are: HQ AU/CF (Chair) and deans, or their equivalent, from the following AU schools and colleges: AWC, ACSC, SAAS, SOC, AFOATS, CEPME, CPD, CADRE. AU/CC may attend PRB meetings at his/her discretion. When in attendance, AU/CC is considered a primary member.
 - 3.1.2. Advisory members are AU/XP (or designate), AU/CFA, AU/CFR, AU/CFF, AFIADL/CC (or designate), AUL/LD (or designate), and any other AU organizations the PRB Chair deems necessary for a particular review. AU/CFAC manages the program review process and is responsible for its conduct and coordination.
- 3.2. Types of Reviews. There are two types of AU program reviews:
 - 3.2.1. Formal Review.
 - 3.2.1.1. For all schools except Junior ROTC (JROTC), the PRB examines the school's curriculum plans to assess both the need for and the adequacy of the instructional program. Schools formally brief the PRB on their program of instruction, emphasizing major changes proposed/projected for the educational program over the next two years. Attachments 2 and 3 provide specifics on what to include in a PRB briefing.
 - 3.2.1.2. For JROTC programs, the PRB reviews only the educational objectives and curriculum materials produced for the program.

3.2.1.3. The PRB provides a report to AU/CC recommending approval of a school's proposed curriculum plan. If there are any substantive disagreements between the school's plan, the PRB recommendations, reports of the AU Board of Visitors, the AU Command Board of Advisors (CBOA), and/or recommendations of external accrediting bodies, the school commander/commandant may brief the AU/CF and AU/CC regarding the school's position and recommendations for reconciliation of differences.

- 3.2.2. Special (Out-of-Cycle) Review. AU/CC or AU/CF may request a review of a school's curriculum at any time other than the normally scheduled review identified in attachment 1. The school being reviewed provides HQ AU/CF, within seven workdays of the review, any information or responses to questions raised by AU/CC or AU/CF. AU/CFAC will work with the school to find a suitable time to brief AU/CC or AU/CF.
- 3.3. Keeping Other Air University Schools Informed of Curriculum Changes. Schools should stay abreast of changes in the other schools of Air University. This is especially important for schools aligned under the Continuum of Education, where changes in one school's curriculum could ultimately affect the instructional program of another school along the continuum. Schools are strongly encouraged to invite members from other schools as observers at meetings where discussions of curriculum changes will occur. One convenient avenue for this type of exchange is in the Curriculum Integration Groups (CIGs). CIGs are encouraged to present proposed curriculum changes in their respective core areas for the purpose of informing other schools.

3.4. Curriculum Plan Approval.

- 3.4.1. Schools submit a copy of their proposed curriculum plan and PRB briefing (both in electronic form) to HQ AU/CFAC. Upon receipt, AU/CFAC will schedule a date for the school's briefing that will provide board members at least 10 workdays to review materials before the briefing. Schools submit to AU/CFAC a curriculum plan containing at least the information described in paragraph 3.4.2 as an MS Word document. The school also provides AU/CFCA an electronic copy of the school's briefing as a MS PowerPoint file. Attachment 2 displays an outline schools may follow in developing their briefings. Attachment 3 lists common items the board requests schools provide in their briefings. Any information provided in the briefing does not need to be duplicated in the curriculum plan, and vice versa. However, all the required information described in paragraph 3.4.2 must appear in either the curriculum plan document or the briefing slides.
- 3.4.2. The curriculum plan submitted by the school provides an overview of the proposed instructional program (the thrust of the curriculum), a description of how it supports the Continuum of Education Strategic Guidance (CESG), and identification of major changes for the next two academic years. The school must also provide documentation, known as an *audit trail*, to describe proposed major course change, course deletion, or course addition (for both core and elective courses). The audit trail describes the rationale for the proposed curriculum changes and explains the data/information that support the changes. A suggested list of questions that relate to decisions at each stage of the ISD process is provided in attachment 4. Schools may use any/all of these questions or may adopt other

formats/questions for their audit trails. In addition to this general information, the curriculum plan should also include the following information:

- 3.4.2.1. Comparison of the proposed curriculum with the current curriculum by major course division (area, phase, department, etc.) emphasizing changes in substance and distribution of topics across the course.
- 3.4.2.2. Description of major instructional areas, learning objectives, relationship of levels of learning to what is prescribed in the Continuum of Education, instructional methods, delivery modes and time allocations.
- 3.4.2.3. Description of the evaluation system used at the school, emphasizing types of data collected, sources, typical survey response rates, and how the results of course, end-of-course, and postgraduate data are used for curriculum improvement. Explain how program assessment data, as provided to HQ AU/CF on Air University Program Assessment Form (available from AU/CFAI), are used to support proposed curriculum changes.
- 3.4.2.4. Faculty requirements for the school/course, such as number and type (military, civilian, specialty, etc.) of faculty authorized, assigned, and required to properly execute the curriculum.
- 3.4.2.5. Description of any research program describing student research requirements and ongoing or projected faculty research.
- 3.4.2.6. Description of school organizational structure in terms of who develops, who executes, and who evaluates the school's curriculum. This description should include the number of personnel dedicated to development, execution, and evaluation, as well as an explanation of whether or not personnel overlap these areas, for example, curriculum developers also execute (teach), developers also evaluate, etc.
- 3.4.2.7. Description of how other schools were informed of the proposed curriculum changes.
- 3.4.3. For new or substantially altered segments of instruction, the curriculum plan should include an audit trail that emphasizes the specific changes and supporting rationale, including the source of the change (for example, higher headquarters directives, specific end-of-course or postgraduate feedback, recommendations of the AU Board of Visitors, etc.) The curriculum plan serves as a planning and execution document for school curriculum personnel. To that end, a school should provide the PRB the same plan they use in documenting their curriculum development efforts.
- 3.4.4. The format of the plan may vary according to each school's needs. However, all curriculum plans must contain at least the information listed in paragraph 3.4.2.

3.5. AU Actions.

3.5.1. Except for AFIT programs, HQ AU/CFAC schedules a formal PRB within 2 weeks after a school submits its curriculum plan. The board may accept the proposed curriculum plan or recommend changes. Recommended changes are coordinated and resolved with the affected school. HQ AU/CF sends a copy of the proposed report to the school commander or commandant for a substantive review. HQ AU/CF then forwards the board's recommendation for approval to AU/CC and an information copy to the school commandant or commander.

- 3.5.2. AU educational programs may conduct one pilot test (preliminary) offering of a new or revised course (or portion) without informing/briefing the AU PRB. Before conducting subsequent offerings, however, the school briefs the PRB requesting approval to continue course offerings. For CADRE and CPD, pilot testing is authorized for new courses (or course segments) of any length. For all other AU schools and colleges, pilot testing is authorized for instructional program segments not to exceed one course, phase, or block of instruction.
- **4. Air Force Institute of Technology (AFIT) Requirements and Responsibilities.** HQ AU/CF participates in program reviews of AFIT schools. AFIT schools are exempted from the requirement to submit curriculum plans for their academic programs to HQ AU/CF in advance of their course reviews. However, AFIT schools will send copies of minutes of program review meetings to HQ AU/CF as soon as practical following the completion of the review.
 - 4.1. AFIT/CF or AFIT/CV submits to HQ AU/CF a copy of the proposed program review schedule for AFIT's graduate and continuing education programs no later than 1 September each year, listing review dates for the following calendar year. The AU Program Review Board (PRB) chair (AU/CF) and/or the Air University Curriculum Coordinator (AU/CFAC) attend AFIT program reviews at the invitation of AFIT/CC/CV/CF.
 - 4.2. AFIT/CC, via AFIT/CF, invites the AU PRB Chair (AU/CF) and/or the AU Curriculum Coordinator (AU/CFAC) to attend AFIT Program Review Conferences (PRC) for each AFIT school and provides a schedule of PRCs in accordance with guidance provided in paragraph 4.1. AFIT/CC briefs AU/CC and AU/CF annually on proposed changes to AFIT educational programs.
 - 4.3. AFIT curriculum and evaluation planners are required to use the ISD process as prescribed by AFI 36-2301, AU Supplement 1 to AFI 36-2201, *Developing, Managing and Conducting Training*, and as described in AFMAN 36-2234, AFMAN 36-2236, and AFH 36-2235, Vol 10, to identify and validate education requirements; develop learning objectives based on those requirements; and design, implement, and evaluate instruction to achieve the course objectives.
- **5. Joint Accreditation Self-Study.** This section applies to schools that require joint accreditation. Currently, only AWC and ACSC are affected by this paragraph. When seeking joint accreditation, these schools conduct a self-study before a Process for Accreditation of Joint Education (PAJE) accreditation visit in accordance with CJCSI 1800.01A, *Officer Professional*

Military Education Policy (OPMEP) guidelines. The schools should schedule a briefing with AU/CC and AU/CF to discuss the highlights of the self-study, taking into account the OPMEP requirement to receive self-study packages at least 45 days prior to a PAJE visit. After approval by AU/CC, schools may forward their completed self-study packages to the Joint Education Branch of the Joint Staff (J7-JEB) via HQ USAF/DPDE. Schools should also provide an electronic copy of the self-study to AU/CFA.

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Attachment 1

AU BIENNIAL PROGRAM REVIEW SCHEDULE

	Curriculum Plan Due
<u>School/Program</u>	to HQ AU/CF
AIS Curriculum Plans	Jan (even years)
ACSC Resident & Nonresident Curriculum Plans	` '
AWC Resident & Nonresident Curriculum Plans	April (even years)
CEPME Resident & Nonresident Curriculum Plans	September (even years)
SAAS Curriculum Plans	May (odd years)
CPD Curriculum Plans	August (odd years)
AFOATS (OTS, ROTC, and JROTC) Curriculum Plans	September (odd years)
SOC (ABC and SOS) Resident & Nonresident Curriculum Plans	October (odd years)
CADRE Course Curriculum Plans	December (odd years)

NOTE 1: This schedule provides general time frames for curriculum submission to HQ AU/CF. Exact submission dates may vary slightly from year to year. Schools should contact the AU Curriculum Coordinator (HQ AU/CFAC) before its scheduled curriculum submission time to finalize a precise submission date. HQ AU/CF requires proposed curriculum plans be submitted in electronic form at least 10 workdays before the PRB convenes, and briefing slides at least 3 workdays before the PRB convenes.

NOTE 2: AFIT schools schedule reviews of their academic programs. In accordance with paragraph 4.1 of this instruction, AFIT/CF or AFIT/CV submits to HQ AU/CF a copy of the proposed program review schedule for AFIT's graduate and continuing education programs no later than 1 September each year, listing review dates for the following calendar year. As stated in paragraph 4 of this instruction, AFIT schools are exempted from the requirement to submit curriculum plans for their academic programs to HQ AU/CF in advance of their course reviews. However, AFIT schools will send a copy of minutes of program review meetings to HQ AU/CF as soon as practical following the completion of the review.

Attachment 2

BASIC OUTLINE FOR PROGRAM REVIEW BRIEFINGS

- **A2.1.** Schools are encouraged to use the outline below to prepare their PRB briefings. The outline summarizes information presented elsewhere in this instruction.
- **A2.2.** Brief overview of the school's mission and the variety of its educational programs.
- **A2.3.** Description of the school's organizational structure in terms of who develops, who executes, and who evaluates the school's curriculum. Include the number of personnel dedicated to development, execution, and evaluation, as well as an explanation of whether or not personnel overlap in these areas, for example, curriculum developers also execute (teach), developers also evaluate, etc. (one slide can present this information).
- **A2.4.** Specifics of the proposed instructional programs under review (moderate level of detail).
 - A2.4.1. Describe the levels of learning of major course objectives and how these levels and objectives align with the requirements of the Continuum of Education Strategic Guidance (CESG).
 - A2.4.2. Provide evidence that mandated objectives in the CESG are, in fact, being addressed through appropriate instruction or activity.
 - A2.4.3. Describe departments/areas/phases of the school's instructional program, including hours devoted to each and indicate whether these proposed hours represent a change from the current program.
 - A2.4.4. Discuss instructional delivery modes (for example, use of non-traditional distance learning technologies).
 - A2.4.5. Project curriculum changes over the next two years (if necessary, provide an implementation timeline).
 - A2.4.6. Discuss proposed changes to the curriculum including supporting rationales for change, source of the change, expected results of the change, etc.
- **A2.5.** Specifics of the school's internal and external evaluation systems.
- **A2.6.** Discuss the Common PRB Items of Interest contained in Attachment 3 (discussion of these items may either be interspersed throughout the briefing, where appropriate, or addressed together in a separate section of the briefing).
- **A2.7.** Discuss issues the school is facing or anticipates over the next 2 years of which AU Headquarters should be apprised. Provide additional discussion of areas where the school requires assistance from AU Headquarters and/or other AU organizations.

Attachment 3

COMMON PROGRAM REVIEW BOARD ITEMS OF INTEREST WHICH SCHOOLS SHOULD ADDRESS IN THEIR BRIEFINGS

- **A3.1.** Except for the first Item of Interest listed below, all others apply to all AU schools. In preparing your curriculum proposal and briefing, include a discussion of those items below that apply to your school.
- **A3.2.** (AWC, ACSC) For JPME Phase I accredited schools, describe:
 - A3.2.1. Where they stand relative to accreditation standards
 - A3.2.2. How long before their next reaffirmation
 - A3.2.3. The school's efforts to prepare for reaffirmation
- **A3.3.** (All) Discuss proposed changes in the courses offered by the school to include:
 - A3.3.1. Description of major instructional areas: goals, objectives, instructional methods, time allocations
 - A3.3.2. Rationale for each major change
 - A3.3.3. Description of your school's application of the Instructional Systems Development (ISD) process to the major changes proposed
- **A3.4.** (All) Describe the school's evaluation system, types of data collected, and how data are used for curriculum improvement
 - A3.4.1. What is the typical return rate experienced by the school for mail-out surveys
 - A3.4.2. What changes in customer satisfaction have occurred over the past year for your curriculum (resident and non-resident, if applicable)
 - A3.4.3. If school has a distinguished graduate (DG) program, describe how it's going
- A3.5. (All) Describe the school's faculty development program
- **A3.6.** (All) List faculty requirements (authorized, on-board, civilian or military mix, etc.), using the OPMEP definition of faculty: "Members of an educational institution who teach, conduct research, or prepare or design curriculum."
- **A3.7.** (All) Describe if/how the school's faculty resources have been shared during the past year with other AU schools, other sister-service schools, etc.
 - A3.7.1. Describe projections for sharing faculty resources for the next academic year
 - A3.7.2. Describe steps taken or planned regarding faculty sharing with other schools at AU
- **A3.8.** (All) Describe any research programs at the school (student, faculty, and staff).
- **A3.9. (All)** What did the AU Board of Visitors (BOV) and/or Command Board of Advisors (CBOA) say about your school on its previous visit? If there were recommendations requiring further action on the school's part, what has been accomplished to date?

SAMPLE AUDIT TRAIL QUESTIONS

- **A4.1.** AU schools develop audit trails to document major course revisions, additions, or deletions. The definition of the word "major" may vary from school to school. The addition or deletion of a core or elective course, or even a single lesson, for example, may be considered a major change regardless of its length due to the vital nature of the subject matter. Most major changes, however, will be more evolutionary than revolutionary. In those instances, we may define a major change as any addition, deletion, or full-scale revision of instructional material where 25 percent or more of the course hours have been changed from the previous year's curriculum plan.
- **A4.2.** For meaningful reference, a course's audit trail must address those items relevant to its Instructional Systems Development (ISD) efforts. Schools may also address items related to their program/course development and execution efforts in addition to those listed below. Schools should consider the questions below and statements to help guide the development of their audit trail documentation.
- **A4.3. NOTE:** This list is not all-inclusive; those responsible for ISD documentation may add to or delete from this list as appropriate, depending on the school, course, and changes made. Similarly, it is not necessary to cover all of the items listed below, but only those relevant to your particular needs.

A4.4. PHASE I -Analyses

- A4.4.1. What is the reason for the curriculum action? (Air Staff or AU directive, formal study, faculty or student comments, findings from a previous course evaluation, etc.)? What information have you used to begin to determine instructional requirements to meet student needs?
- A4.4.2. What process will be used to determine whether or not your current course is deficient in the identified area(s)?
- A4.4.3. What is the overall planned course of action for implementing the change (timelines, milestones, etc.)? What data have you collected? Have you clearly determined the learning outcomes, e.g., skills and knowledge required?
- A4.4.4. Have you considered all the resources required to support instruction?
- A4.4.5. Have you analyzed a typical student profile to clearly establish target audience needs?

A4.5. PHASE II -Design

A4.5.1. What educational requirements influence the curriculum action?

A4.5.2. When deleting instructional content from the course, identify how the deleted material is expected to affect the flow of the rest of the course. Also, identify any course reorganization or resequencing necessary to accommodate the deleted content.

- A4.5.3. When adding or revising existing course content, identify any content additions, changes, and deletions.
- A4.5.4. When revising an entire course of instruction, identify any content additions, changes, and deletions.
- A4.5.5. What student outcomes are expected to be derived from a new course or from the curriculum addition, deletion, or revision? What possible positive or negative side effects could result from the change?
- A4.5.6. Identify the key educational areas and objectives added or changed (if any) as a result of the change.
- A4.5.7. What exactly will your course teach?
- A4.5.8. How will you measure what the student learns?
- A4.5.9. How will you teach the material?
- A4.5.10. How will your school implement the course?
- A4.5.11. How will you collect and maintain student and course data?
- A4.5.12. Will the instruction address both cognitive and affective learning?
- A4.5.13. Have you reviewed instructional methods and media selection?
- A4.5.14. Is your design learner-centered?
- A4.5.15. Have you determined the scope of your lesson plan?
- A4.5.16. Have you indicated the types of test instruments to be used to measure the identified behaviors?

A4.6. PHASE III -Development

- A4.6.1. Have you described the materials to be developed?
- A4.6.2. Have you clearly identified the mission, vision, and values of the course?
- A4.6.3. Is the course organized by areas and supporting period objectives?

A4.6.4. Have you determined hours and approximate allocation of hours to objectives?

- A4.6.5. Are instructor requirements identified?
- A4.6.6. Have all necessary support materials, media/equipment utilization, copyright permission letters and instructor/guest speaker invitations been identified?
- A4.6.7. Has the course been validated by internal reviews and pilot tested?

A4.7. PHASE IV -Implementation

- A4.7.1. Determine if everything is ready to begin formal instruction.
- A4.7.2. Are all system functions in place?
- A4.7.3. Are adequate resources available?

A4.8. EVALUATION (Evaluation is a central function that takes place in every phase.)

- A4.8.1. Has your evaluation been a continuous process and has it directly impacted each of the steps in the ISD process?
- A4.8.2. Does your evaluation determine the quality of the course? Does it assess the success of your course graduates? **NOTE:** Internal and external evaluation should be used for this purpose. Evaluation should focus on curriculum, students, and instructors.
- A4.8.3. Has your evaluation provided a systematic means to furnish data and information for assessing the effectiveness and efficiency of the course?
- A4.8.4. How has/will program assessment data from your evaluations be used to improve the instructional program?